



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,983	08/07/2003	Kenneth Allen Windhorst	C-7220	3873

7590
M. Susan Spiering
c/o Celanese Ltd
IP Legal Dept, IZIP 701
P. O. Box 428
Bishop, TX 78343

09/24/2007

EXAMINER

PUTTLITZ, KARL J

ART UNIT	PAPER NUMBER
----------	--------------

1621

MAIL DATE	DELIVERY MODE
-----------	---------------

09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED
SEP 24 2007
GROUP 1600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/635,983
Filing Date: August 07, 2003
Appellant(s): WINDHORST ET AL.

Michael Ferrell
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/21/2007 appealing from the Office action mailed 11/28/2006.

Art Unit: 1621

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,214,347

Grekel

10-1965

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC §§ 102, 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 14-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over (U.S. patent No. 3,214,347 to Grekel et al. (Grekel)).

The rejected claims are drawn to, inter alia, a process for preparation of an organic compound selected from the group consisting of carboxylic acids, ketones having boiling points from 154 C to 170 C, and esters having boiling points from about 168 C to about 250 C, comprising combining the organic compound with water to form a mixture of the organic compound and water comprising from about 100 ppm to about

Art Unit: 1621

50,000 ppm water. The claims have been amended to require that the organic compound has a stable APHA color value of 15 or less. See claim 1

The rejected claims also cover those embodiments comprising removing a product stream comprising the organic compound from a reaction zone in which the organic compound is prepared and introducing the product stream into a distillation column having a lower portion and an upper portion wherein the upper portion and the lower portion are maintained at a temperature of about 23 C to about 250 C and at a pressure of about 10.1 kPa to about 202.6 kPa, and combining the recovered organic compound with water to form a mixture of the organic compound and water comprising from about 100 ppm to about 50,000 ppm water. See claims 10 and 14.

Grekel teaches a singular embodiment in Example 1 wherein an aqueous mixture of crude acids containing isobutyric acid and n-butyric acid is subjected to distillation in a conventional fractionation column. The temperature employed at the bottom of the column is about 175 C. (440 mm.) and the top tower temperature is about 132 C. (300 mm.). From the base of the column a stream is removed that contains approximately 2 percent of the n-butyric acid present in the original feed. A second column containing only water is then started up under total reflux, after which the aforesaid distillate is used as feed. Water is removed from the column under refluxing conditions. Distillate is brought overhead and allowed to stratify into an upper organic layer that contains 4 percent of the n- butyric acid present in the aforesaid original feed. The n-butyric acid is then further purified by distillation to a APHA color value of 5. See description bridging columns 1 and 2.

The difference between the process set forth in the rejected claims and the process set forth by Grekel is that Grekel fails to specifically teach the at the end of the disclosed process, water is combined with butyric acid. However, given the broadest reasonable interpretation of the term "combing" in the context of the instant claims, those of ordinary skill would consider the disclosed steps in Grekel of adding a stream comprising n-butyric acid to the second column and further purifying n-butyric acid as combining with water. See M.P.E.P. § 2111 ("During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." >*In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).<").

Therefore, the step of combining an organic compound with water is well within the motivation of those of ordinary skill, based on Grekel, and therefore, the claims are anticipated within the meaning of section 102, or prima facie obvious under section 103, since this reference teaches the elements of the rejected claims with the requisite particularity and with a reasonable expectation of success.

(10) Response to Argument

Appellant argues that the reference teaches removal of water during purification, unlike the invention which uses water to promote color stability. However, the patent teaches "adding water" in the second distillation column of example I. The claims of the captioned application do not exclude this possibility, and therefore, the step of "adding water" is met by the reference.

Appellant also argues that there is no teaching whatsoever that the finished product of Grekel et al. is color stable to boiling for 1 hour nor is there any disclosure as to water content of that product. However, the reference teaches the required steps and therefore, those of ordinary skill would expect the products to be similar, if not the same. In this regard, there is no objective evidence on record measuring the product disclosed at example I, line 65.

In connection with the above, Appellant argues that the product of Grekel is "substantially dry" and does not meet the water requirements of the claim. However, the examiner points to the range including 100 ppm which would be considered by those of ordinary skill as "substantially dry". Again, there is no evidence on record that this product does not have the requisite water content, much less, the required color values. Further, the examiner notes that the Declaration filed 8/14/2006 does not provide any tests on water or color value of the product at example I, line 65, which is the product of Grekel produced substantially as claimed by the captioned application.


(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 1621


Conferees:


Karl Puttlitz


KARL PUTTLITZ
PATENT EXAMINER 1621
9/17/2007

Yvonne Eyler

Jafar Parsa


YVONNE EYLER, PH.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600


J. PARSA
PRIMARY EXAMINER